From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: Bill Sorsby <bill.sorsby@dlep1.itg.ti.com>
Subject: Re:
Message-ID: <199512181703.LAA27334@dlep1.itg.ti.com>

At 10:38 AM 12/18/95 -0600, you wrote:
>Greetings all. What is the recommended source for dial cord or replacement
>for dial cord? I don't think my local Radio Shack has anything like it
>anymore. Can heavy-weight nylon fishing line be substituted? Seasons
>greetings to all. 73 de WA9SLU glsmith@koess1.delcoelect.com
>
>

I bought out the last dial cord from my local Radio Shack about four months
ago. I've since noticed that Antique Electronic Supply in Tempe, AZ has the
stuff.

Regards,
Bill Sorsby, N5BU

****
bill.sorsby@dlep1.itg.ti.com
Views expressed herein are my own.
****

From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: Sheldon Wheaton <swheaton@sky.net>
Subject: 1935 Callbook Magazine question
Message-ID: <199512180339.VAA28414@sky.net>

I have a copy of a 1935 Radio Amateur's Callbook Magazine that is missing
the cover and first 4 pages. I'd like to determine which issue it is, for
documentation purposes. This magazine was published in March, June, Sept. &
Dec. of each year at that time. My copy features an ad by Midwest Radio
Mart on page 5, and for reference, the first call sign listed on page 200 is
W9HLU. If you have a 1935 Callbook magazine, and could confirm for me if it
is (or isn't) the same as your specific issue, I'd appreciate it.

73, Sheldon
Sheldon Wheaton KC0CW (ex: KA0DRH,WN0DPE)   licensed since 1971
email: swheaton@sky.net   http://www.sky.net/~swheaton
>>> I collect tube type communications radios <<<

From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: "William L. Fuqua III" <wlfuqu00@service1.uky.edu>
Subject: 450TH
Message-ID: <199512181613.LAA10439@service1.cc.uky.edu>

Seems that most of the 450TH's I got were made by GE and not EIMAC. They look a little different and the EIMAC one (only one EIMAC in the batch) was a TL and 5 of the 6 strands of filiment were broken. All but one of the 8 GE's survived shipping and it lost one of the six strands. Only one seems to be a TH the others appear to be TL (determined by the pitch of the grid). The lettering was rubbed off the GE's and on one or two I could see a faint trace of lettering with the light at just the right angle.

I did not know that GE made 450TH or TL's. Does any one have a GE manual that shows this tube or a sub.?

73
Bill ko4ww

William L. Fuqua III P.E.
Department of Physics and Astronomy
CP-177 Chem. Phys. Bldg.
University of Kentucky
Lexington, Ky 40506-0055
E-mail WLFUQU00@POP.UKY.EDU
Phone (606) 257-4155

From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: David Stinson <72227.1640@compuserve.com>
Subject: 50 OHM ANTENNAS AND MIL SURPLUS RIGS.
Message-ID: <951218042312_72227.1640_EHM116-1@CompuServe.COM>

50 OHM ANTENNAS AND MIL SURPLUS RIGS.
Using the TCS and Command Sets with coax-fed antennas.

Most of the WW-II surplus rigs with which we are familiar were designed to work into a high-impedance, electrically short antenna. However, they were also designed to match a broad range of antenna types. There is a misconception that WW-II rigs like the ARC-5, SCR-274-N, TCS and BC-375 cannot be used with a 50-ohm, non-reactive, coax fed antenna. In fact, all these rigs will load-up perfectly on a common dipole. Since the coax feed avoids nastiness like RF in the shack, this is the preferred configuration when using my several vintage WW-II stations.

I think this misconception is grounded in the reaction of the ANTENNA CURRENT meter in the rigs. These meters were designed to be used with a Hi-Z antenna and do not respond well when feeding coax. Ops often see an antenna "current" reading of half an amp or even less and assume the rig is not working. The antenna current meter in my AN/ARC-5 station shows less then 2 on a 1-10 scale, even though it is delivering 35-40 watts to the antenna.

In order to load these old vets into a 50-ohm skywire, you must use a series-tuned L/C antenna circuit. That's when the antenna roller coil on the output of your rig is connected in series with a cap of about 50-80 pF before connecting to the antenna.

The TCS and Command Sets were designed with the ability to series-tune the antenna circuit. In the TCS, the fixed capacitor is connected by switching the ANT. COND. control to "SERIES." In the ARC-5/SCR-274N Command Sets, the 50 pF vacuum series capacitor is the one mounted in the back of the BC-442/A or RE-2 antenna relay. You know--the one you took out and threw away? Don't worry; a good quality 50 pF 1-3KV cap will do as well. (Important note: the BC-442AM differs from the 442/A in that it does not have this capacitor. You'll need an external one.)

Tuning the rigs is pretty simple. Make sure you have good, short ground bonding between all pieces of your rig. This is especially important between the Command transmitter and its BC-442/RE-2 antenna relay. Turn the antenna coupling control to maximum in all cases. Now key your rig and crank the roller inductor for max out. You'll need to re-tweek the plate tuning on the TCS as you go. Don't worry if your TCS set doesn't reach the red marks on you plate current meter. If it's over 100 mils, you're probably fine. (Note: Always tune the TCS in the CW position.) Don't worry about low readings on the Antenna Current meter. If you have high antenna current readings, you've got a reactive antenna.

Here are some typical settings while feeding a 50-ohm dummy load:

Command Set SCR-274N/ARC-5, CW mode
80 meter rig: Roller inductor at 7 (135 mils Ip, 38 watts out).
40 meter rig: Roller inductor at 11 (140 mils Ip, 40 watts out).

TCS 12, CW mode
80 meters: Ant. Loading roller at 7 (130 mils Ip, 27 watts out).
40 meters: Ant. Loading roller at 29 (125 mils Ip, 28 watts out).

The TCS does not have the range to correctly series-tune a 50-ohm antenna on 160 meters. You can set the Ant. Loading roller to max and get about 16 watts out, or you can add additional coil turns external to the antenna connector to get a resonant series circuit.

73 DE Dave Stinson AB5S/7
Lost Wages, Nevada
72227.1640@compuserve.com

From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: don merz <71333.144@compuserve.com>
Subject: 59 and HTYS
Message-ID: <951218031739_71333.144_DHB52-8@CompuServe.COM>

On the GDOs: One of the rare-est has to be the Measurements Model 59 in full regalia. The completely decked out '59 comes in a purple-velvet lined wooden case with 3 heads and 15 coils in 3 racks. VLF to UHF. I have only ever seen one in the flesh...

Freebie: I have about 3 years worth of ham Trader yellow Sheets backissues.
If anyone can think of a use for them they are yours for the postage.
Otherwise they will make a good fire log...
73 and Happy Holidays to all!
Don

From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: Henry van Cleef <vancleef@bga.com>
Subject: Re: 59 and HTYS
Message-ID: <199512180802.CAA21012@zoom.bga.com>

As don merz said

> On the GDOs: One of the rare-est has to be the Measurements Model 59
> in full regalia. The completely decked out '59 comes in a purple-velvet
> lined wooden case with 3 heads and 15 coils in 3 racks. VLF to UHF.
> I have only ever seen one in the flesh...

We had one of these at General Electronics Labs when we were designing a series of commercial FM transmitters. A really superb "class act" dip, sort of like a Beech Bonanza compared to a Cessna 140, when you compare it to the Millen dips. I don't recall that it actually did much more than the Millen dips, but it was easy to use, although you had to watch the head with one eye and the meter with the other, because they were on separate boxes.

```
--
***********************************************************
Hank van Cleef  vancleef@bga.com  vancleef@tmn.com
***********************************************************
```

```
From boatanchors@theporch.com  Mon Dec 18 12:14:35 1995
From: john <johnmb@nando.net>
Subject: >> BA WWW Site image update
Message-ID: <9512172233.AA18963@merlin.nando.net>
```

Thanks to BA'phile Jerry Proc, I've added a bunch of photos showing his restoration of the gear on the RMCS Haida.

Although I am a little dissapointed in the scans, (this scanner is going back to Best Buy tomorrow!!) you should be able to see some LARGE gear, and the excellent work he is doing to refurbish this equipment, and show it to the public.

If __YOU__ have gear that you want to show off, please drop me a note, and we'll make arrangements to add it to the Website archives.

Best 73
/john

PS: HAPPY HOLIDAYS!!!

```
From boatanchors@theporch.com  Mon Dec 18 12:14:35 1995
From: stever@cybercomm.net (Stephan Rashkin)
Subject: Another Callbook Question? Look me up-pse..
Message-ID: <199512180424.XAA25728@raven.cybercomm.net>
```

I'm not sure if this is the correct place to ask this, but I've
tried in the newsgroups and got no response..

If anyone has the '59 and '60 callbooks (and it's supplements), I would
appreciate
a lookup of my call at that time (WV2NHZ)..I have been trying to determine
when I received my Novice..I believe it may have been late in '59. I guess there
would also have been a delay when it would show up there..

I been trying to find out the last couple years..(since becoming a BA'er)..I
realize

now there is no better place to ask than here :0>

Steve, WA2NHZ

From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: w0ogh@ix.netcom.com (Larry Godek)
Subject: BC-348-J-N-Q
Message-ID: <199512172310.PAA27011@ix9.ix.netcom.com>

I have two extra original manuals for the BC-348-J-N-Q receiver. I certainly would like to find appropriate homes for them.

They both rate about a 7 on a scale of 10. Price on request.

Larry W0OGH@ix.netcom.com

From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: dt@scotborders.co.uk (David Topham - Arts & Science)
Subject: Re: Confessions - Mom saved our planet
Message-ID: <9512181200.AA21547@scotborders.co.uk>

Imagine: You're Someone Very Important in government. Hostilities have ceased and you have _mountains_ of equipment, the equipment you needed, the equipment you might have needed, the equipment you didn't need but nevertheless procured, and there's still factories churning out replacements and spares for each of the foregoing categories in triplicate. Then some guy from Statistics waves a graph in front of you - and in 6 months the entire Nation is going to be at least knee deep in _your_ mistakes....

..what's to do? Sell it off cheap to enthusiasts and people of feeble wits!

But there's a flaw. These guys, unaided, would just spread it about. The disposal job is surely just the same but delayed in time?

Not so! Once into private hands this stuff just got tidied up and swept away by Mom, without trace, no residue. Moms have been saving mankind for millenia.

Conservation of matter? Certainly. If you want a BC-610 or an ET-4336 just have a look through Mom's sewing basket. She'll have a couple in there and more besides.

By the way, "tubes, knobs, and a pair of escutcheons" count as components. Everyone knows that components, small hand tools, and _circlips_ get sucked into an alternative universe....

David Topham   GM3WKB   dt@artscience.scotborders.co.uk

From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: mjsilva@ix.netcom.com (michael silva)
Subject: Re: Confessions -- hey, MOM!
Message-ID: <199512171919.LAA04190@ix13.ix.netcom.com>

>   Why do otherwise loving parents _do_ these things?...

Time for a little catharsis. As a kid, then a teenager, I took over a corner of our basement for my "radio place". Then I went off to college, then bounced around, moving about once a year for many years. Nobody touched my stuff. Finally I get my dream house and drive to moms to get everything. Turns out it was all tossed "a few months ago". Scopes, receivers, hundreds of tubes, parts, misc., etc, etc. ARRGHHH!!! I'm told there was quite a group picking over the sidewalk treasures.

Oddly, though, I'm sure it was the loss of something I hadn't looked at in years that has propelled me back into the realm of our "obsolete" friend the tube. I suppose I should say "thanks, mom"....but I just can't :)

73,
Mike, KK6GM

From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: "Stanley L Flegler" <flegler@pilot.msu.edu>
Subject: Re: Dial Cord Replacementt
Message-ID: <199512181747.MAA17707@pilot08.cl.msu.edu>

Antique Electronic Supply, 6221 S. Maple, Tempe, AZ 85283 lists three sizes of dial cord on p. 15 of their current catalog. Their telephone is 602-820-5411.
73 Stan K8RPA, flegler@pilot.msu.edu

From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: Jake Hellbach <kk5hy@accesscom.net>
Subject: Re:DIAL CORD REPLACMENT
Message-ID: <199512181703.LAA24253@uro.theporch.com>

Hi,

I've used heavy guage, about 50-80 pound test fishing line but the cotton
covered type. (at least it feels like cotton), I think nylon would slip.

73'
Jake KK5HY

At 10:44 AM 12/18/95 -0600, you wrote:
>Greetings all. What is the recommended source for dial cord or replacement
>for dial cord? I don't think my local Radio Shack has anything like it
>anymore. Can heavy-weight nylon fishing line be substituted? Seasons
>greetings to all. 73 de WA9SLU glsmith@koess1.delcoelect.com
>
>

____
Email via: kk5hy@accesscom.net
Check out the Westside ARC Web page at:
http://www.accesscom.net/~kk5hy

From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: "Beaudry, Tom" <Tom_Beaudry@tvratings.com>
Subject: RE: DIAL CORD REPLACMENT
Message-ID: <30D5D185@mailgate.dun.nielsen.com>

RS still has it listed in their catalog. They can order it for you.

From: boatanchors[SMTP:boatanchors@theporch.com]
Sent: Monday, December 18, 1995 11:08 AM
Subject: Re:DIAL CORD REPLACMENT

Hi,
I've used heavy guage, about 50-80 pound test fishing line but the cotton
covered type. (at least it feels like cotton), I think nylon would slip.

73'
Jake KK5HY

At 10:44 AM 12/18/95 -0600, you wrote:
>Greetings all. What is the recommended source for dial cord or
replacement
>for dial cord? I don't think my local Radio Shack has anything like it
>anymore. Can heavy-weight nylon fishing line be substituted? Seasons
>greetings to all. 73 de WA9SLU glsmith@koess1.delcoelect.com
>
>

Email via: kk5hy@accesscom.net
Check out the Westside ARC Web page at:
http://www.accesscom.net/~kk5hy

From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: Bill Meara <74537.1100@compuserve.com>
Subject: Drake 2-B Xtal Cal
Message-ID: <951218103843_74537.1100_EHH65-2@CompuServe.COM>

Bob - With great enthusiasm I pulled my Model 2-AC Crystal Calibrator out of my 2-B this morning, in hopes of finding the answer to your questions. Unfortunately getting inside the Copper box turned out to be more difficult than I thought. There are four points on the top of the unit where components from the board have been soldered onto the copper.   At the risk of having to post a message for the Confessions section ("I didn't want to take the calibrator apart, but a guy from the BA list forced me to do it!") I tried to unsolder them. Unfortunately (perhaps luckily) the copper box is a great heat sink and I didn't get past the first point. Let me know if you REALLY need me to break into this box! Good Luck
73! Bill N2CQR/HI8
Santo Domingo, Dominican Republic
Running: HT-37, 2-B, HW-101, HQ-100 (with SP-600
and SX-43 awaiting repairs)

From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: "William C. Robbins" <billrobb@serv01.net-link.net>
Subject: FS: National NC-98
Message-ID: <199512180151.UAA07360@serv01.net-link.net>

Must sell or trade this National NC-98 receiver. Excellent condition. Make offer.

Bill WA8CDU

From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: jproc@worldlinx.com
Subject: Haida Images at Zynet Web Site
Message-ID: <Chameleon.4.01.2.951217095122.jproc@jproc>

Dear BA's,

Today, John Brewer announced that Haida's radio room was available for browsing at his Web site. Unfortnately, 'Mr. Murphy' has stuck and it seems that I can't download images 1 through 5. Images 6 through 10 are displayable.

John has done a fabulous job so far and it looks like the Web page that I envisioned in my mind had I been doing it. Once the bugs are ironed out, Haida's radio rooms can be seen by accessing :

http://www.zynet.com/~johnb

Regards,
~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Jerry Proc VE3FAB
E-mail: jproc@worldlinx.com
Radio Restoration Volunteer
HMCS Haida, Toronto Ontario
~~~~~~~~~~~~~~~~~~~~~~~~~~~~

From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: Bob Roehrig <broehrig@admin.aurora.edu>
Subject: Help: someone with Drake 2-B
Message-ID: <Pine.ULT.3.91.951217212641.10471B-100000@admin.aurora.edu>

This weekend I broke down and built a crystal calibrator for my 2-B. I had a hard time getting one of my 100 KC rocks to oscillate on the right frequency (I suspect it is a series mode rock) so I used one of many 200 KC jobs. First of all, no matter what rock I put in there it would not oscillate unless I added a cap from the screen grid to ground. I wound up with 47pf. OK - no problem. It works reliably and right on freq.

My question is this - if any of you have a 2-B calibrator, could you check it for me and see if there is really a cap there or not? Also I want to know if the drawing is really right in that the screen resistor is 100K and the plate resistor is 330K. This didn't seem right to me to begin with and sure enough, the plate voltage was WAY lower than the screen, which is a no-no. So I paralled the plate resistor with 33K and it looks much better although the higher harmonic level is a little lower. I am wondering if they got the values on those 2 resistors reversed. SO I need someone to look at an actual unit to satisfy my curiosity. Thanks in advance

(I thought I was EXTREMELY lucky to find one of those wierd 4 pin plugs)!

73 de Bob, K9EUI (broehrig@admin.aurora.edu)

From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: Bill Meara <74537.1100@compuserve.com>
Subject: HW-101 UnDelay
Message-ID: <951218101935_74537.1100_EHH65-1@CompuServe.COM>

Hello Raymond! Thanks for taking time away from the Genemid meteors (and all your other projects!) to think about my HW-101. A while back the possibility of problems in the tube socket was mentioned here (in conjunction with a discussion of damage that can be done by spray contact cleaners). I went in and checked the socket (looking for a short between pins). I'll go back and see if I can find anything that might cause an open grid.

As for the 6EA8, I got my (1) spare from AES. Fortunately the HW-101 has several other 6EA8's so I can do some "internal" swapping. If I do come across some extras I'll share them with you.

Any word on availability of the 6GW8 audio amp?   I found the e-mail address of a guy from AES and sent an inquiry. I have one spare from Hungary but it doesn't work   :-(

Saludos (from my island to yours!)   73   Bill N2CQR/HI8

From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: "Ray L. Mote" <rmote@rain.org>
Subject: Re: HW-101 undelay
Message-ID: <Pine.SUN.3.91.951218083024.28252A-100000@coyote.rain.org>

Bill, I suffered a problem between '66 and '69 while operating my SB-101 as K5FKT/KP4, mostly on SSB. It showed up as the T-R relay in the final cage dropping out on transmit. I tried replacing the relay with a new one from Heath and it worked fine -- for a while. Then someone suggested placing a small muffin fan over the final cage to reduce the heat. I bolted it, with some grommets as vibration reducers, to the lid of the SB-101 and the problem was gone forever.

I now suspect that Heath was running components in that circuit right on the ragged edge, but no longer have my cherished SB-101. It got wiped out in Corpus Christi, TX during Hurricane Celia back around '69/'70. My problem showed up whether using VOX or PTT. You might want to check voltages in that circuit both when it's cool and when it's hot, then evaluate what you've found. Good luck!

73.....Ray Mote, W6RIC <rmote@rain.org>

From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: pbock@melpar.esys.com (Paul H. Bock)
Subject: Re: Johnson modulator?
Message-ID: <9512181418.AA14600@syseng1.se.melpar.esys.com>

>Does anyone know if Johnson offered a kit or factory built
>modulator for the Johnson Viking Adventurer?

>Steve, WA2NHZ

Yes, they offered a screen modulator kit. WRL also offered one which could be easily adapted to the Adventurer as well, and that's what I used with my Adventurer in 1958-59 (before I went in the Navy). It worked OK, and I was able to successfully participate in the Virginia Phone Net (VFN) and, on occasion, the Tarhell Emergency Net, running AM to a Windom. Had a lot of great 75-meter 'phone ragchews, too.

As best I recall, the WRL and Johnson screen modulators were very similar (a friend had the Johnson unit on his Adventurer). BTW, the circuitry was pretty basic, so with a schematic from Hi-Manuals or someplace it should be duplicate-able.

And, if you're running an Adventurer (as I am) how about a CW sked sometime?

73,

Paul, K4MSG

From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: Sandra L Knepper <slkst29+@pitt.edu>
Subject: KWM-380
Message-ID: <Pine.3.89.9512171934.F16627-0100000@unixs4.cis.pitt.edu>

I need the control board and synthesizer board for a KWM-380. Or anyone who could fix these boards in my KWM-380.

Thank you.

Dave, W3BJZ

From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: Keith Heitzmann <kk5fe@accesscom.net>
Subject: Need phone number for dial face repros
Message-ID: <199512181616.KAA20426@uro.theporch.com>

Hey everyone,
I understand that there is someone that advertises in Electric Radio mag that makes dial face repros. I dont have the subsription as of yet, so if anyone has this please let me know.

Thanks and happy holidays,

Keith KK5FE
****
***********Keith Heitzmann************
************Covington, La.*************
*******Email: kk5fe@accesscom.net*******
****

From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: "Grant Youngman" <gyoungma@jaws.gtetel.com>
Subject: Possible 4H4-C Source
Message-ID: <9512181433.AA16230@netman>

BA'ers ..

I promised to post the phone number of a possible source for 4H4-C ballast tubes in response to a recent query to the list. I purchased two about a month ago from:

Typetronics
305/583-1340

Don't know if they have any more, but if you need/want one give them a call. They were $15.00 each plus a little postage.

Regards .. Grant/NQ5T

Grant Youngman -- NQ5T

gyoungma@gtetel.com

From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: "ROBERT W DOWNS, WA5CAB" <103012.2130@compuserve.com>
Subject: PRT-1 TRANSMITTER
Message-ID: <951217195928_103012.2130_GHU57-1@CompuServe.COM>

Paul,

AN/PRT-1, codenamed 'Chick' was a small portable jammer designed to jam German tactical communications, which remained AM. It was placed by front-line troops or paratroops. The related AN/CRT-2 was designed to be parachute dropped. Not too long ago, there was an article either on one of those sets, or another related set, but several minutes digging through back issues of ER, OTB and AWC didn't turn it up, and I can't remember the author's name for certain, so I won't mention who I think that it was. I probably put the issue with the article in it somwhere that I could easily find it! Both sets are briefly mentioned in the Appendix to the third of the three Signal Corps Green Books, but only what I've written above. Communications jammers were reported to have been used with great effectivness against the Sixth Panzer Army in the Ardennes in late '44, but equipment mentioned are higher powered aircraft sets, such as Jackal.

If no one else seriously wants it and you don't want to keep it, I'll be glad to take it. E-mail me at the address below and we can haggle over the details.

73, Robert, WA5CAB
703012.2130@compuserve.com

From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: pmills@cyberhouse.com (Phil Mills)
Subject: R388 questions
Message-ID: <199512181311.HAA12353@ns.cyberhouse.com>

Can anyone tell me the voltage required for the muting relay in the R388? Also, mine has a "break-in on/off" switch on the front panel in the lower left where my Fair Radio documentation says there should be a speaker jack. This switch is presently not wired to anything and does not show up on the schematic anywhere. Can anyone tell me what this switch did and how it was wired?

thanks,
Phil

Phil Mills, AB5TH

pmills@cyberhouse.com
713-482-2763

From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: "Chuck Rippel" <crippel@exis.net>
Subject: R390A audio help
Message-ID: <199512180017.TAA29899@marlin.exis.net>

This 1967 build, "new," R390A is nice but has been causing a good deal of hair pulling the past few months. The first problem was low gain in the RF deck. This turned out to be a coupling capacitor in the 2-3 mHz IF which had a lead cut right where it soldered onto a tube socket. It was so close, <1/64th" that the signal was coupling between the stages through the small capacitance formed by the tube base and lead end. This probably happened when it was being built and the excess lengths or component leads were being cut away.

I removed the Keremomos mod'ed audio chassis the other day and stuck my stock one back in which a friend had been borrowing. It worked fine... or so I thought........ Now, it has this problem:

When you increase the level of the "Line Gain" control, the local audio level will also increase. When you increase the level of the "Local Gain" enough, the "Line Meter" will indicate a level. It is possible to set the "Local Gain" for a comfortable listening level and then increase the "Line Gain" and have the audio from the speaker nearly dissappear. Increase or decrease the "Local Gain" and the audio level will be restored but if you match that movement with a like adjustment in the "Line Gain", the speaker audio (from pins 6 and 7) will again dissappear. This indicates something is mixing but at 180 degrees out of phase.

The two audio circuits are nearly descrete. Having worked in Hi-Fi for about 15 years (Jap Xistor stuff), this is a new one on me. If I had to guess, I venture that it almost looks like one end of an audio transformer is open and the audio signal is being fed into the other where the cancellation is taking place. Problem with that is, the audio seems fine as long as you don't use the Line and Local audio outputs at the same time which I do from time to time. Besides, this R390A is too nice not to have at 100% I just checked the sensivitity at 4.8 mHz where it is .19 for 10db S/N + N with the 4 kc filter using AM. Not too shabby, really.

W/out extender cables, troubleshooting the audio chassis in the unit will be a tough nut. I wish I had a good one to swap out. Anyone have any good ideas? How about: "call Fair Radio and get another audio chassis for $30?"

Why do I feel so lucky these days?

Drop me an E-Mail please.

-73-
Chuck
WA4HHG
+++

Chuck Rippel
crippel@exis.net

+++

From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: "ROBERT W DOWNS, WA5CAB" <103012.2130@compuserve.com>
Subject: Re: SuperPro (and other) panels
Message-ID: <951218035810_103012.2130_GHU126-1@CompuServe.COM>

Group,

While catching up on my back reading, I've followed the SuperPro panel thread that Bill S. started back to the beginning. Unless I missed it (some Digests don't seem to show up here), no one ever flatly stated what I believe to be the case. SuperPro's through the SP-400 have alloy steel panels, the lettering is engraved, and the nameplates are etched.

Over the last 35 years, I've had around 15 sets from the SP-110 through many of the Military models to the SP-400. All had alloy steel panels (which sounds vague, since all steels are, by definition, alloys, but is generally taken to exclude the common low-carbon steels, like 1018, the 300, 400 and 17- PH series stainless steels, etc). Some of them have fairly good tarnish resistance (even in Houston!), although they will all eventually rust. Chrome plating hasn't, to my knowledge, been much used as a paint foundation although both copper and zinc have. A plating shop could answer the 'plated or not plated' question. Incidentally, chrome plated parts are not shiny unless they're polished, or did someone already mention that?

There may be SuperPro's around with aluminum front panels, but I would bet that they were procurred for some other reason, such as shaving the weight a bit, rather than for aluminum's non-magnetic properties. Much of the rest of the SuperPro's construction is plated steel. My 18 years in the Mine Force have been spent mostly with mines, not Minesweepers, but I doubt that a non-magnetic front panel would get the set certified as non-magnetic for Sweep service. Not on my watch, anyway.

At the time that the SuperPro's were being built, the engraving would probably have been done with a Pantograph and a template. All of the metal nameplates that I've seen (on SuperPro's and their power supplies) were etched, using the same basic process as is used in making printed circuit boards. The mask and etchant materials vary with the type of metal, of course. As applied to nameplates, the process leaves raised, rather than lowered, lettering. The background is then 'filled' with paint for contrast.

73, Robert Downs, WA5CAB
103012.2130@compuserve.com

From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: Bill Sorsby <bill.sorsby@dlep1.itg.ti.com>
Subject: SuperPro Fun
Message-ID: <199512181806.MAA10400@dlep1.itg.ti.com>

Greetings,

I installed two BFO mods in the BC-779-A SuperPro over the weekend.

The first mod increased BFO injection by feeding the BFO into the third IF amp screen grid. This had the undesirable side effect of leaking the BFO into the AVC loop rendering the meter useless and possibly desensing the receiver. (This mod was from Oct '62 CQ.) I'd made sure the mod was reversible, so it came out without scarring the receiver.

During the process I discovered that the .25 uf cap forming the AVC time constant was leaky, defeating the AVC action and resulting in the s-meter staying pegged with BFO enabled.

I substituted a 10 uf electrolytic (closest value I had). The resulting 10 sec time constant was slow. Worse, it had leakage too, although it didn't cause the meter to peg. Since AVC worked well without a cap (same time constant as for AM), I simply left it out.

The second mod was an experiment to see how much the BFO level could be increased in the existing configuration. The BC-779 design uses a 5 pf (er, 5 mmfd) cap to inject the BFO signal into the primary of the third IF transformer. I gradually increased this cap until I got to .01 uf and noticed that the IF was slightly detuned but the BFO level was sufficient for all but the very strongest SSB signals. Reducing the RF gain slightly worked for the stronger signals.

I worked on the .25 uf AVC loop cap and discovered that I couldn't get to the side of the cap connected to the BFO switch because laced cabling was in the way. In the process of moving the cabling around I broke the switch, popping off the phenolic holding the AVC section off the switch. (True confession: Honest, I was trying to avoid cutting the cable lacing. I didn't know the switch would break if I pushed the wires just a little bit.)

After buying a replacement from Radio Shack, I opted to repair the old switch with wire and a ty-wrap. Looks kinda rough now but will probably last as long as the radio.

I'll look around for something close to .25 uf locally to try in the AVC circuit. The fast time constant without a cap works seems to well though.

Anther thing worth mentioning: the crystal filter adjustment cap all of a sudden started to freeze up. A few squirts of silicone lubricant and WD-40 seemed to solve the problem. (I just hope the fix is permanent).

Now the old BC-779-A SuperPro is working very nicely. I am amazed at the amount of selectivity attainable from the single quartz crystal used. It provides excellent CW selectivity down to the limit of too much ringing (which appears to be on the order of a hundred hertz or so).

What comes as a surprise to me is that the single crystal filter provides a very competent filter for SSB. True single signal response is possible, although optimum adjustment involves quite a bit of trial and error. (Should have known that from the old BC-779-B I had when I was a kid. Only thing is, the crystal filter in that radio was broken.)

Now, what the radio really needs is a temperature compensated LO. Seems like I read about such a mod years ago. Does anyone have details?

Also, in case anyone has a parts SuperPro: I need one stainless steel nut for the dust cover, the BFO switch, an extra crystal filter tuning capacitor (just in case) and since this receiver looks so nice now I might even consider putting it in a cabinet if somebody has one they could part with.

BTW, I used a combination of Armor-All and WD-40 on the white powdery knobs and they now look very good now. (I really used the WD-40 to drive water out of the set screw holes after washing the knobs, but WD-40 seemed to improved the appearance of the knobs beyond that which Armor-All had provided.)

One final thought: Does anyone know what, if any, significance to attach to the fact that the nameplate on my SuperPro has no serial number or model number engraved in it. At first I thought this was probably just a replacement nameplate taken from a parts inventory somewhere along the way, but on close inspection the nameplate appears to be original, at least it appears to have received moisture and fungus proofing at the same time as the rest of the receiver and the markings on the receiver and backside of the nameplate match precisely. Since this BC-779-A is somewhat unusual in having a stainless steel front panel, I wonder whether there might be some significance to this. Also I noticed that the plating used on the all the IF cans and such appears to have been hand polished, so much so that in a few places the underlying copper can is visible. I'm probably thinking too much about all of this. These are all probably unrelated, but any thoughts would be appreciated.

Regards,
Bill Sorsby, N5BU

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bill.sorsby@dlep1.itg.ti.com
Views expressed herein are my own.
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From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: GALBRAITH CHRISTOPHER <99galbra@lab.cc.wmich.edu>
Subject: Transformer sources?
Message-ID: <Pine.SUN.3.91.951218041847.10907B-100000@grog>

Gang,
Anybody got the # handy for Lucas Transformer (no ERs handy--put 'em away so I could get some work done :).

Also, any info on custom transformer/choke builders would really be appreciated. Hammonds are kind of pricey, so I figure why not spend the money and have 'em custom/spec made?

73, Chris KA8WFC

From boatanchors@theporch.com Mon Dec 18 12:14:35 1995
From: mflicinski@VNET.IBM.COM
Subject: Tunnel Dipper - Mine works!
Message-ID: <199512181752.LAA27909@uro.theporch.com>

I must have one of the few Heath Tunnel dippers that function to any degree... in fact, I have found it quite useful over the years.

One of my favorite uses is as an antenna radiation indicator.
I excite an antenna with broadband RF from a noise bridge and then tune to find the peaks of energy with the tunnel dipper. I don't

expect it to have much calibration accuracy... that's what a well calibrated receiver is for.

Meanwhile, an 807 sits on the operating table to remind me of times past.

Mike, K2UXE
(mflicinski@vnet.ibm.com)